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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,183	11/14/2003	Delbert Tesar	126928-1000	9377

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EXAMINER

PANG, ROGER L

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,183

Applicant(s)

TESAR, DELBERT

Examiner

Roger L Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 8-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-5-2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to communications filed for application 10/714,183 on June 21, 2004.

Election/Restrictions

Claims 1-5 and 15-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 21, 2004.

Drawings

New corrected drawings are required in this application because the submitted drawings are informal (copies, hand drawn lines, margins, etc.). Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: on page 19, all occurrences of "218" should be replaced with --318--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of Rilbe. With regard to claim 6, Fox teaches a rotary actuator comprising: an actuator shell 1; an eccentric cage 19/4, disposed within the actuator shell; a prime mover having a first prime mover portion 3 rigidly fixed to the actuator shell and a second prime mover portion 3a, fixed to the eccentric cage, and capable of exerting a torque on the first prime mover portion; a bearing 11 having a first bearing portion fixed to the actuator shell and a second bearing portion, free in rotation with respect to the first bearing portion; an output attachment plate 10 rigidly fixed to the second bearing portion; a shell gear 9 rigidly fixed to the actuator shell; an output gear 11 rigidly fixed to the output attachment plate; and an eccentric 8, disposed about the eccentric cage, having a first gear 8a portion meshed to the shell gear and a second gear portion 8b, adjacent to the first gear portion, meshed to the output gear. Fox lacks the teaching of said bearing being a cross-roller bearing. Rilbe teaches an actuator with an eccentric 10, and a cross-roller bearing 22 located between a shell 11 and an output attachment plate 12. It would have been obvious to one of ordinary skill at the time of the invention to modify Fox to employ a cross-roller bearing in view of Rilbe in order to provide a more easily manufactured and cost efficient actuator (Col. 2). With regard to claim 7, Fox teaches the actuator further comprising a first structural link rigidly connected to the actuator shell and a second structural link rigidly connected to the output attachment plate (Fig. 1). With regard to claim 14, Fox teaches the actuator, but lacks the specific teaching of 10 or more gear teeth within one or more of the first and second gear portions being in contact at any point in time. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fox to employ 10 or more

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gear teeth within one or more of the first and second gear portions being in contact at any point in time, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of Rilbe as applied to claim 6 above, and further in view of Hashimoto. Fox teaches the actuator but lacks the teaching of said gear portions having a circular profile. Hashimoto teaches an eccentric employing teeth with a circular profile (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fox to employ gear teeth with a circular profile in further view of Hashimoto in order to provide better balanced load capacity for said gearing (Col. 2). With regard to claim 12, Hashimoto teaches the actuator, wherein the gear teeth having a circular profile are dimensioned to have a slight interference (Fig. 2).

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox in view of Rilbe in further view of Hashimoto as applied to claim 12 above, and further in view of Rouverol. Fox teaches the actuator, but lacks the teaching wherein a cavity is disposed in said gear teeth. Rouverol teaches of gear teeth 10 with cavities 11 disposed therein. It would have been obvious to one of ordinary skill at the time of the invention to modify Fox to employ gear teeth with cavities in further view of Rouverol in order to substantially eliminate tooth wear (Col. 1).

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Allowable Subject Matter

Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yanagisawa, Verge, Distin, Jr. and Nohara have been cited to show similar actuator devices.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 305-3597) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)


If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445. The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L. Pang
Patent Examiner
Art Unit 3681

July 9, 2004